

Research on Coordination and Management of Tourism Resources from the Perspective of Supply Chain——Take the Altay region as an example

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Abstract. With the rapid development of China's tourism industry and the upgrading of residents' consumption structure, competition in the industry has shifted from enterprise-level to supply chain-level. As a result, the tourism supply chain has garnered significant attention. This paper analyzes the tourism industry in the Altay region and concludes that there are still problems with the tourism supply chain, such as unclear departmental management responsibilities, unreasonable resource allocation and maintenance planning, and a lack of cross-scenic area cooperation awareness. From a supply chain perspective, research on the coordination and management of tourism resources in the Altay region of Xinjiang is crucial. This study aims to explore the development of a green tourism supply chain in the Altay region by combining the characteristics and challenges of the tourism industry in the area with successful tourism supply chain cases from both domestic and international sources. The study also aims to propose effective coordination and management strategies for the tourism supply chain in the Altay region to optimize resource utilization. Additionally, suggestions for improving the coordination of the tourism supply chain in the area will be enumerated.

1 Introduction

With the rapid development of China's tourism industry, a highly competitive tourism market has emerged. Modern tourism competition is the competition between different supply chains. In this context, the Altay region should fully coordinate its advantages as well as use quality tourism resources to create a quality tourism environment to attract tourists. Therefore, the optimization and development of the tourism supply chain is the most important thing in this respect. The tourism supply chain is built on the basis of the traditional manufacturing supply chain and combined with the unique characteristics of the tourism industry supply chain [1].

The tourism supply chain in a narrow sense only covers suppliers and customers who directly provide tourism products or services, and does not consider indirect suppliers and the public sector. In contrast, the tourism supply chain in a broader sense includes all businesses and organizations involved in tourism activities, covering not only suppliers who directly provide tourism products or services but also sub-suppliers and the public sector. In terms of the position of consumers in the supply chain, consumers are not only on the demand side but also on the supply side. At the same time, unlike physical supply chains, consumers are exposed to many nodes of the tourism supply chain

network. Therefore, the heterogeneity of tourism products and the mobility of consumers among the nodes of the tourism supply chain shape the uniqueness of the tourism supply chain. The supply chain is composed of various producers in socio-economic activities, which contain three kinds of flows: information flow, physical flow, and financial flow. Through the method of system science and management science, the logistics, information flow, and capital of each department in the supply chain are planned, coordinated, and controlled. So as to achieve the purpose of maximizing customer satisfaction and also to improve the profitability of the supply chain. Therefore, research on the coordination of the tourism supply chain in the Altay region has certain theoretical and practical significance.

By studying the tourism supply chain in the Altay region, this paper aims to analyze the coordination and management methods of tourism resources from the perspective of the supply chain. At the same time, it develops a plan to solve the problem of coordination of tourism resources and the lack of a unified coordination mechanism for the tourism supply chain in the Altay region.

2 Literature review

In the European Tourism Supply Chain Management System, Richard Tapper and Xavier Font believe that

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transport, accommodation, restaurants, bars, souvenirs, handicrafts, waste disposal systems for food production, and the infrastructure that supports the development of the tourism industry should all be included in the tourism supply chain. Moreover, the waste recycling and disposal sector should also be included in this system, so as to build a complete green tourism supply chain [2]. Under this supply chain system, European travel agencies implement supply chain management in three major steps: firstly, clarifying common regulations and standards; secondly, requiring suppliers to implement the standards in place and providing corresponding training and technical support; and lastly, setting up an assessment mechanism to consider whether to continue to co-operate with them based on the assessment status. In addition, travel agencies seek practical assistance through membership of TOI (Travel Agents Initiative for Sustainable Tourism Development). Successful practice in the European travel agency supply chain brings favorable benefits to itself and to the supply chain as a whole. It reduces costs and increases revenues for the travel businesses involved. It also enhances the brand value of the travel destination. At the same time, it improves the image of the travel agency and thus reduces financing costs.

Beijing-Tianjin-Hebei scenic tourism supply chain co-operation profit model firstly plays the dominant role of tourist attractions [3]. As the core of the tourism supply chain, tourist attractions are the dominant force and spatial platform for the entire profit creation.

Around the scenic spot as a carrier, the establishment of cross-regional multiple tourist attractions alliance, so as to drive the overall tourism supply chain to create more profits. Secondly, the tourism market demand formed around the tourists constantly adjusts the operation mechanism, closely follows the emerging demand generated by the tourist market, enhances the attractiveness of tourist attractions for tourists, and extends the consumption chain of tourists in tourist attractions, so as to bring good benefits to the tourism supply chain of Beijing-Tianjin-Hebei scenic spots.

In short, the Beijing-Tianjin-Hebei scenic area to the region's tourist attractions is a joint leader, and tourist consumption and tourism market demand-oriented, gathering tourism suppliers, tourism operators, and tourism agents, to carry out a full range of co-operation. Then drive the Beijing-Tianjin-Hebei region to promote the gradual sustained and healthy development of the tourism supply chain.

3 Supply chain analysis of tourism in Altay region

3.1 Status of the Altay tourism supply chain

Along with the continuous improvement of tourism infrastructure and related transport networks, the tourism supply chain system in the Altay region has become increasingly mature, attracting a large number of tourists and corporate capital into the tourism industry. This development has also led to the growth of the tourism

supply chain in Altay, creating many jobs and tax revenues.

In order to enrich its tourism advantages, the Altay region attracts tourists to visit by promoting quality tourism resources and exploring local tourism culture in depth. However, in the concept of sustainable development, the Altay region still faces some challenges in green supply chain development. The first is the fragmentation of tourism resources and the lack of a unified coordination mechanism between different suppliers and tourist destinations, which leads to inefficient resource utilization. Secondly, there is the problem of information asymmetry, where there are barriers to the transmission of information between the participants in the supply chain, affecting the rational allocation and effective use of resources. In addition, resource competition and conflict are also a challenge. Because tourism resources are limited, there are competitive relationships between different suppliers and destinations, which may lead to unfair resource allocation and conflicts.

Finally, cooperation and trust issues also exist, with a weak basis of cooperation and a lack of trust mechanisms among the participants in the supply chain, which affects the smooth coordination of resources. In order to address these challenges, government guidance and support need to be further strengthened to encourage the participation of enterprises and all sectors of society to jointly promote the development of green supply chains and achieve the goal of sustainable tourism. In addition, the Altay region needs to establish a cross-scenic cooperation model to strengthen cooperation and collaboration among scenic spots. By enhancing awareness and consensus, promoting information sharing, and establishing a unified coordination mechanism, the efficiency of cooperation between different scenic spots can be improved to achieve mutual benefit and win-win [4].

In conclusion, the development of the tourism supply chain in the Altay region has made some achievements but still faces some challenges. By strengthening cooperation and coordination and solving the problems of information asymmetry, resource competition, and conflict, as well as cooperation and trust, the supply chain can be further optimized to promote the sustainable development of tourism in the Altay region [5].

3.2 Promoting the integration of the tourism industry in the Altay region

Promoting the integration of the tourism industry in Altay is one of the key steps to improve the tourism supply chain in the region. Cooperation among stakeholders is key to minimizing the complexity of conflicts in the construction of various supply chains in the tourism industry[6]. As shown in Fig 1, the integration of the tourism industry can enhance cooperation and innovation across various fields, leading to improved overall competitiveness and customer satisfaction. To achieve this, the government should

focus on strengthening the planning and guidance of the tourism industry and integrating it deeply with other related industries. For instance, combining tourism with culture, sports, agriculture, and other industries can promote the diversification of tourism products. To

enhance the attractiveness and added value of tourism, cultural and art festivals, sports events, rural tourism activities, and other similar events can be organized to attract more tourists.



Fig. 1. Sustainable Tourism Supply Chain Network in the Altay Region. (Picture credit :Original)

Additionally, a cooperation mechanism can be established among tourism enterprises to promote resource sharing and complementary advantages. By establishing alliances, cooperatives, and other organizational forms, tourism enterprises can promote cooperation and exchanges to achieve resource integration and market development. For instance, Brand USA has collaborated with partner organizations like Trip Advisor and Expedia to enhance tourist attractions and develop high-quality destinations, which has resulted in attracting a large number of tourists[7].

Furthermore, to promote sustainable tourism development, it is essential to enhance cooperation with local residents and communities. This can be achieved by providing training and education to improve the quality of tourism services and raise awareness among locals, enabling them to participate in the tourism industry.

Additionally, it is crucial to prioritize the protection and preservation of local natural and cultural heritage to maintain a balance between tourism development and environmental conservation. Finally, promote scientific and technological innovation to advance digitalization and intelligent development. Utilize big data, artificial intelligence, and other technical means to enhance the efficiency and quality of the tourism supply chain[8]. For instance, provide personalized and convenient tourism services to tourists through the intelligent guide system and online booking platform. In conclusion, promoting the integration of the tourism industry in the Altay region requires the joint efforts of the government, enterprises, and social parties. through multi-party cooperation and innovation can we realize the sustainable development of the tourism industry and enhance the competitiveness and influence of the tourism supply chain in the Altay region.

3.3 Building a sustainable tourism supply chain network in the Altay region

Promoting cooperation in addition to coordination in the Altay region is crucial. All tourism-related enterprises, organizations, and public sectors need to enhance

communication apart from that collaboration, forming a close-knit network of cooperation. This can be achieved through jointly formulating development strategies, sharing resources, and exchanging information, ensuring coordination on top of that cooperation among various links in the supply chain [9].

To enhance product quality on top of that innovation, companies in the tourism supply chain should continuously strive to improve product quality apart from offering unique and appealing tourism products. Additionally, it is important to encourage innovation in addition to developing tourism products that meet market demands and are environmentally friendly to cater to the diverse needs of tourists. [10].

It is crucial to strengthen the awareness of sustainable development throughout the supply chain. A sustainable tourism industry can only be built by taking into account not only the ecological utility, but also the socio-economic and social environments, and only by balancing the three can it be built[11].

This means that enterprises should not only focus on environmental protection but adopt sustainable business practices to reduce the consumption of natural resources and damage to the environment. At the same time, they should also pay attention to the development of local communities and respect and protect local cultural heritage. through such efforts can the sustainable development of the tourism supply chain be realized, providing a better environment and society for future generations.

The Altay region needs to strengthen personnel training and technical support in improving the efficiency and competitiveness of the tourism supply chain. This includes providing professional training and technical support to improve the professionalism and service level of practitioners. At the same time, the application of innovative technologies is encouraged to improve the efficiency and competitiveness of the supply chain. Through these initiatives, talents with more practical experience and professional knowledge can be developed and innovative technologies can be utilized to improve the operation of the supply chain, thereby

enhancing the performance and competitiveness of the entire tourism supply chain[12].

To attract more tourists to the Altay region, it is necessary to actively develop both domestic and international markets, strengthen publicity and promotion efforts, and enhance the region's tourism brand image. By increasing its popularity and influence, the region can attract more attention and visitors to explore its natural beauty.

To strengthen the supervision and management of the various links in the tourism supply chain, it is necessary to establish a sound regulatory mechanism. Additionally, relevant regulations and standards should be formulated to ensure fair competition in the tourism market and the protection of consumer rights.

The measures outlined above can promote sustainable development of the tourism supply chain network in the Altay region, leading to synergistic development of the economy, society, and environment. Additionally, these measures can enhance the competitiveness of the Altay region as a tourist destination and provide tourists with a better overall experience.

4 Conclusion

Using the Altay region of Xinjiang as an example, this study examines the coordination and management of tourism resources from a supply chain perspective. The study reveals that tourism resources are not being rationally allocated or effectively utilized, and that there is a lack of a unified coordination mechanism in the tourism supply chain. To improve the tourism industry in the Altay region, this paper proposes the following recommendations:

The coordination and management of tourism resources are crucial for achieving optimization and sustainable development of the tourism supply chain. Integrating tourism resources in the Altay region can improve resource utilization efficiency, reduce waste, and better meet the needs of tourists through coordination. To coordinate and manage tourism resources effectively, it is essential to establish a close cooperative network among all tourism-related enterprises, organizations, and the public sector. This will help to form a mechanism for collaborative work, enabling the sharing and optimal allocation of tourism resources. Objective and clear communication is key to achieving this goal. The introduction of advanced technology and management methods can effectively promote the coordination and management of tourism resources. For instance, information technology and data analysis can be utilized to forecast resources and demand, which can help to better arrange the matching between resource supply and demand. The government has a crucial role in coordinating and managing tourism resources. It should strengthen supervision and regulation, formulate relevant policies and regulations, and promote the rational development and protection of tourism resources. Additionally, the government should provide support and guidance to promote the innovation

and development of tourism enterprises. In addition, the coordination and management of tourism resources should focus on sustainable development, taking into account environmental protection and social responsibility. To achieve sustainable development of the tourism supply chain, it is necessary to promote sustainable business practices and the concept of green tourism.

In summary, studying tourism resource coordination and management from a supply chain perspective is significant for the tourism development of the Altay region in Xinjiang. By establishing cooperative networks, introducing advanced technologies, strengthening government supervision, and focusing on sustainable development, the tourism supply chain can be optimized and developed sustainably. This, in turn, will enhance the competitiveness and attractiveness of the Altay region as a tourist destination.

This paper aims to explore the coordination and management of tourism resources in the Xinjiang Altay region from a supply chain perspective. However, the study is limited to this region and may not fully represent the situation in other regions. Future research can expand the scope of subjects to obtain more comprehensive results. This study primarily focuses on the supply chain perspective of tourism resource coordination and management. However, it does not delve deeply into the impact of other related factors on tourism development. Future research should combine other theories and methods and comprehensively consider policy, market, and environmental factors to analyze tourism development more comprehensively. Finally, this paper has not yet addressed specific implementation programs and policy recommendations for promoting the coordination and management of tourism resources in practice. Future research can explore this further and provide more targeted guidance for tourism development.

In summary, this paper has conducted a preliminary exploration of tourism resource coordination and management from a supply chain perspective. However, there are still some shortcomings. Future research should expand the scope of subjects, consider other factors comprehensively, and propose specific implementation programs and policy recommendations to further improve and deepen research in this area.

Authors Contribution

All the authors contributed equally and their names were listed in alphabetical order.

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